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AMENDMENTS TO THE CLAIMS

1. (cancelled).

2. (previously presented) The system of claim 31, wherein the first sensor comprises an NMR sensor.

3. (currently amended) The system of claim 32, ~~wherein the non-rotating stabilizer is adjustable, and~~ further comprising a second sensor for detecting motion of the drilling tubular proximate the first sensor~~, a diameter of the non-rotating stabilizer being adjusted in response to the detection of motion by the second sensor~~.

4. (original) The system of claim 3, wherein the second sensor comprises an accelerometer.

5. (original) The system of claim 3, wherein the second sensor comprises three mutually orthogonal accelerometers.

6. (previously presented) The system of claim 31, wherein the wellbore comprises a deviated wellbore.

7. (currently amended) The system of claim <u>31</u> ~~32~~, wherein the ~~non-rotating~~ stabilizer comprises:

   ~~i. a housing attached to said drilling tubular;~~

   ~~ii. a sleeve substantially surrounding at least a portion of said housing;~~

   ~~iii.~~ a bearing acting cooperatively with said sleeve and said housing for allowing relative motion between the sleeve and the housing~~; and~~

~~iv. a rib attached to said housing, said rib extending radially outward from the housing to reduce motion of said first sensor below a predetermined level.~~

8. (previously presented) The system of claim 32, wherein the predetermined level is 2.0 millimeter.

9. (original) The system of claim 7, wherein the rib is a straight rib.

10. (original) The system of claim 7, wherein the rib is a spiral rib.

11. (currently amended) The system of claim 7, further comprising a second stabilizer having at least one ~~wherein the rib is an~~ adjustable rib, said adjustable rib adapted to be controllably extended to contact a wellbore wall.

12. (previously presented) ~~The system of claim 7,~~ A system for controlling sensor motion while measuring a parameter of interest in a wellbore formed in an earthen formation, comprising:
    (a) a drilling tubular conveyed into the wellbore, said drilling tubular having at least one vibrational node;
    (b) a first sensor positioned along the drilling tubular at the at least one vibrational node, the first sensor measuring the parameter of interest;
    (c) a non-rotating stabilizer forming the vibrational node, the non-rotating stabilizer having a sleeve rotatably coupled to the drilling tubular and at least one ~~wherein the rib is an~~ adjustable rib adapted to be controllably extended to contact a wellbore wall; and ~~further comprising~~
    (d) a downhole controller and a second sensor for detecting motion of the drilling tubular proximate the first sensor, said controller controlling the

adjustable rib to reduce motion detected by said second sensor below a predetermined level.

13. (currently amended) The system of claim 7, wherein the housing is adapted to displace the center of the ~~non-rotating~~ stabilizer relative to a longitudinal axis of the drilling tubular.

14. (previously presented) The system of claim 31, further comprising two non-rotating stabilizers cooperating to form the vibrational node, with one non-rotating stabilizer being deployed on each side of said first sensor.

15. (previously presented) The system of claim 31, wherein the first sensor comprises at least one of (i) a density sensor and (ii) a porosity sensor.

16. (cancelled)

17. (previously presented) The method of claim 34, wherein the first sensor comprises an NMR sensor.

18. (currently amended) The method of claim 35, further comprising using a second sensor disposed in said drilling tubular for detecting motion of the drilling tubular proximate the first sensor~~; and adjusting a diameter of the non-rotating stabilizer in response to the detection of motion by the second sensor~~.

19. (original) The method of claim 18, wherein the second sensor comprises an accelerometer.

20. (original) The method of claim 18, wherein the second sensor comprises three mutually orthogonal accelerometers.

21. (original) The method of claim 16, wherein the wellbore comprises a deviated wellbore.

22. (previously presented) The method of claim 35, wherein the ~~non-rotating~~ stabilizer comprises:

~~i.~~ a housing adapted to attach to said drilling tubular~~;~~

ii. ~~a~~ the sleeve substantially surrounding at least a portion of said housing; and

~~iii.~~ a bearing acting cooperatively with said sleeve and said housing for allowing relative motion between the sleeve and the housing~~; and~~

~~iv. a rib attached to said housing, said rib extending radially outward from the housing to reduce motion of said first sensor below a predetermined level.~~

23. (previously presented) The system of claim 35, wherein the predetermined level is 2.0 millimeter.

24. (original) The method of claim 22, wherein the rib is a straight rib.

25. (original) The method of claim 22, wherein the rib is a spiral rib.

26. (currently amended) The method of claim 22, further comprising a second stabilizer having at least one ~~wherein the rib is an adjustable rib, said~~ adjustable rib adapted to be controllably extended to contact a borehole wall.

27. (currently amended) The method of claim 22, wherein the housing is adapted to displace the center of the ~~non-rotating~~ stabilizer relative to a longitudinal axis of the drilling tubular.

28. (currently amended) The method of claim 35, further comprising ~~wherein the non-rotating stabilizer~~ ~~comprises~~ two non-rotating stabilizers cooperating to form the vibrational node, with one non-rotating stabilizer being deployed on each side of said first sensor.

29. (previously presented) The method of claim 34 wherein the first sensor comprises at least one of (i) a density sensor and (ii) a porosity sensor.

30. (previously presented) ~~The method of claim 22,~~ A method for controlling sensor motion during a measurement, comprising:

a. conveying a drilling tubular in a wellbore to a downhole location;

b. forming a vibrational node in the drilling tubular using a stabilizer having at least one rib attached to a sleeve rotatably mounted to the drilling tubular; and

c. disposing a first sensor at the vibrational node, said first sensor measuring a formation parameter of interest, wherein the at least one rib is an adjustable rib adapted to be controllably extended to contact a borehole wall and further comprising a downhole controller and a second sensor for detecting motion of the drilling tubular proximate the first sensor, said controller controlling the adjustable rib to reduce motion detected by said second sensor below a predetermined level.

31. (currently amended) A system for controlling sensor motion while measuring a parameter of interest in a wellbore formed in an earthen formation, comprising:

(a) a drilling tubular conveyed into the wellbore, said drilling tubular having at least one vibrational node;

(b) a stabilizer forming the at least one vibrational node and including:

(i) a housing adapted to attach to said drilling tubular;

(ii) a sleeve rotatably mounted on said housing; and

(iii) a non-adjustable rib attached to said sleeve, said rib extending radially outward from the housing to reduce motion of said first sensor below a predetermined level; and

(c) ~~(b)~~ a first sensor positioned along the drilling tubular at the at least one vibrational node, the first sensor measuring the parameter of interest.

32. (cancelled)

33. (previously presented) A system of claim 31 wherein the at least one vibrational node has been analytically predicted.

34. (currently amended) A method for controlling sensor motion during a measurement, comprising:

a. conveying a drilling tubular in a wellbore to a downhole location;

b. forming a vibrational node in the drilling tubular using a stabilizer having one or more non-adjustable ribs attached to a sleeve rotatably mounted to the drilling tubular ; and

c. disposing a first sensor at the vibrational node, said first sensor measuring a formation parameter of interest.

35. (currently amended) The method of claim 34, wherein ~~a non-rotating~~ the stabilizer forms the vibrational node by reducing motion of said first sensor below a predetermined level during said measurement.

36. (previously presented) A method of claim 34 wherein the at least one vibrational node has been analytically predicted.